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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,771	09/04/2001	Erik Jensen	JENSEN=7	4127
1444	7590	01/14/2004	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C.			SMITH, DUANE	
624 NINTH STREET, NW			ART UNIT	
SUITE 300			PAPER NUMBER	
WASHINGTON, DC 20001-5303			1724	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/914,771	JENSEN, ERIK	
	Examiner	Art Unit	
	Duane S. Smith	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12-08-03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39 is/are allowed.
- 6) ☒ Claim(s) 14-23 and 34-40 is/are rejected.
- 7) ☒ Claim(s) 24 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1724

1. In claim 27, "i.e. defined..." should be amended to be positive recitation or deleted. For examination purposes the phrase has not been given any patentable weight.
2. In claim 27 last line "5" should be deleted.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-15,18,21,25,40 are rejected under 35 U.S.C. 103(a) as being unpatentable over German patent 1054421 taken together with WO91/01784.

German patent 1054421 teaches an apparatus for rectification of a liquid or scrubbing of a gas including horizontal elongated processing chamber(10) divided by a plurality of guide plates(12,13) extending across a major part of the cross section of the processing chamber, means for supplying liquid(15,30), means for discharging liquid(18), means for supplying gas(11), means for discharging gas(14), liquid application means(16) extending along a major part of the chamber length for throwing water transversely to the longitudinal axis of the processing chamber. German patent 1054421 discloses the apparatus essentially as claimed except for the liquid application means to be a rotor having liquid collecting pockets in the direction of rotation. However, WO91/01784 does disclose such liquid application means(10). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the liquid application means of WO91/01784 for the liquid application means of the German

Art Unit: 1724

reference in that mere substitution of one known functional equivalent liquid application means for another being well within the scope of one of ordinary skill in the art and there has been no showing of unexpected or unobvious results of utilizing one known liquid application means over another.

With regards to claims 18, the gas flow follows a transverse tortuous path, see gas flow path arrows of figure 1. With regards to claim 25, the German reference teaches a conveyor means (21).

5. Claim 16-17, 19-20, 22, 23, 27-34, 36, 38, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over German patent 1054421 taken together with WO91/01784 as applied to claims in paragraph above in view of Laycock et al (US Patent No. 282,994).

German patent 1054421 taken together with WO91/01784 teaches the apparatus essentially as claimed except for disclose a removable end wall releasable fastened by bolts to flanges for allowing insertion of guide plates into a processing chamber wherein the guide plates are releasable fastened into various predetermined axial spaced positions. However, Laycock et al disclose a removable end wall (M) releasable fastened by bolts to flanges (K) for allowing insertion of guide plates (B) into a processing chamber wherein the guide plates are releasable fastened (E, E') into various predetermined axial spaced positions (page 2, col. 1 or col. 3 of the entire document, lines 28-32). It would have been obvious to one of ordinary skill in the art at the time of the invention to include a removable end wall and guide plates in the apparatus of the German patent in order to configure the interconnected section in order to obtain the desired efficiency as suggested by Laycock et al. (col. 3 lines 31-32).

Art Unit: 1724

With regards to claim 22, German patent discloses a liquid receiving chamber(19).

6. Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over German patent 1054421 taken together with Gale(US Patent No. 3,353,337)

German patent 1054421 disclose the apparatus essentially as claimed except for the conveyor means being a screw conveyor. However, Gale does disclose a screw conveyor(30,47). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute a screw conveyor for the conveyor means of the German reference in order to remove accumulated solids by the same shaft that rotates the liquid application means as suggested by Gale(col. 3 lines 35-40) and thus save upon energy requirements.

7. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over German patent 1054421 taken together with WO91/01784 in view of Laycock et al as applied to claims above, and further in view of Gale(US Patent No. 3,353,337)

German patent 1054421 taken together with WO91/01784 in view of Laycock disclose the apparatus essentially as claimed except for the conveyor means being a screw conveyor. However, Gale does disclose a screw conveyor(30,47). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute a screw conveyor for the conveyor means of the German reference in order to remove accumulated solids by the same shaft that rotates the liquid application means as suggested by Gale(col. 3 lines 35-40) and thus save upon energy requirements.

Art Unit: 1724

8. Claim 24,35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claim 39 is allowed over the prior art of record.

10. Applicant's arguments filed 12-08-03 have been fully considered but they are not persuasive.

Applicant is silent to the 103(a) rejection under the German reference taken together with the WO91/01784 reference. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant further argues that Laycock et al fails to disclose a removable member as in the instant invention. Laycock et al was only cited to show a removable member (M) is well known in the art for access to a processing chamber. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case the inclusion of a removable member for access to the process chamber. All other arguments have been considered but are not deemed to be persuasive.

Art Unit: 1724

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duane S. Smith whose telephone number is 571-272-1166. The examiner can normally be reached on 8:30-6:00 M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0987.

Application/Control Number: 09/914,771

Page 7

Art Unit: 1724

Duane S. Smith
Primary Examiner
Art Unit 1724

Dss
12-30-03

D. Smith
12-30-03